## INTERNATIONAL SEARCH REPORT

In ational Application No PCT/EP2004/050017

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 E21B10/62 E21B10/64 E21B17/07 E21B23/02 E21B7/06

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols) IPC 7 E21B

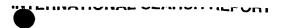
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

## EPO-Internal

	ENTS CONSIDERED TO BE RELEVANT	
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Α	WO 00/17488 A (SHELL CANADA LTD ;SHELL INT RESEARCH (NL)) 30 March 2000 (2000-03-30) cited in the application page 8, line 1 -page 11, line 10; figures 1,3,4	1
P,A	WO 03/004825 A (SHELL CANADA LTD; RUNIA DOWNE JOHANNES (NL); SHELL INT RESEARCH (N) 16 January 2003 (2003-01-16) cited in the application page 11, line 19 -page 12, line 18; figures 1-4	1
A	US 3 554 304 A (LINK HOWARD D ET AL) 12 January 1971 (1971-01-12) cited in the application column 4, line 68 -column 10, line 73; figures 1-17	1

Y Further documents are listed in the continuation of box C.	χ Patent family members are listed in annex.
Special categories of cited documents:  A' document defining the general state of the art which is not considered to be of particular relevance  E' earlier document but published on or after the international filling date  L' document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)  O' document referring to an oral disclosure, use, exhibition or other means  P' document published prior to the international filling date but later than the priority date claimed	<ul> <li>"T" later document published after the international filing date or priority date and not in conflict with the application but clied to understand the principle or theory underlying the invention</li> <li>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</li> <li>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.</li> </ul>
Date of the actual completion of the International search	*&* document member of the same patent family  Date of mailing of the international search report
4 May 2004	17/05/2004
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer  Van Berlo, A





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Category °	citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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4	US 3 169 591 A (OWEN JOHN L ET AL) 16 February 1965 (1965-02-16) column 3, line 34 -column 4, line 26; figures 1-5	1
4	US 5 472 057 A (WINFREE MICHAEL B) 5 December 1995 (1995-12-05) column 3, line 66 -column 5, line 46; figures 1,2 column 6, line 4-57	1
4	US 3 747 674 A (MURRAY W) 24 July 1973 (1973-07-24) column 5, line 41 -column 7, line 50; figures 1-9	1
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